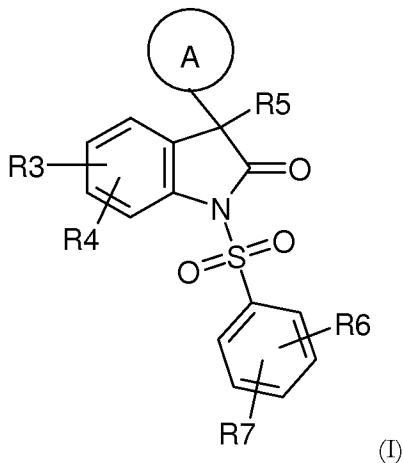


In the Claims:

1. (Currently Amended) A compound of the formula (I)



in which

A is an aromatic heteromonocyclic ring,

where the heterocycles are 5- or 6-membered rings and comprise up to 4 heteroatoms selected from the group consisting of N, O and S, ~~and up to 2-oxo groups~~, where not more than one of the heteroatoms is an oxygen or sulfur atom,

and A may be substituted by radicals R¹¹, R¹² and/or R¹³,

where

R¹¹, R¹² and R¹³ at each occurrence are selected independently of one another from the group consisting of hydrogen, chlorine, bromine, iodine, fluorine, CN, CF₃, OCF₃, NO₂, OH, O-C₁-C₄-alkyl, O-phenyl, O-C₁-C₄-alkylen-phenyl, phenyl, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, NH₂, NH(C₁-C₄-alkyl) and N(C₁-C₄-alkyl)₂,

R³ and R⁴ are selected independently of one another from the group consisting of hydrogen, chlorine, bromine, iodine, fluorine, CN, CF₃, OCF₃, NO₂, OH, O-C₁-C₄-alkyl, O-phenyl, O-C₁-C₄-alkylen-phenyl, phenyl, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, NH₂, NH(C₁-C₄-alkyl) and N(C₁-C₄-alkyl)₂, or

R³ and R⁴ are connected to give -CH=CH-CH=CH-, -(CH₂)₄- or -(CH₂)₃-,

R⁵ is a radical (W)-(X)-(Y)-Z, where

W is selected from the group consisting of NR⁵⁴, NR⁵⁴-(C₁-C₄-alkylen) and a bond,
X is selected from the group consisting of CO, CO-O, SO₂, NR⁵⁴, NR⁵⁴-CO, NR⁵⁴-SO₂, CO-NR⁵⁸ and a bond,
Y is C₁-C₆-alkylen, C₂-C₆-alkenylen, C₂-C₆-alkynylen, or a bond,
Z is selected from the group consisting of hydrogen, E, O-R⁵², NR⁵¹R⁵², S-R⁵², where

E is an unsaturated, saturated or partially unsaturated mono-, bi- or tricyclic ring having a maximum of 14 carbon atoms and 0 to 5 nitrogen atoms, 0 to 2 oxygen atoms and/or 0 to 2 sulfur atoms, said ring may comprise up to two oxo groups, and may be substituted by radicals R⁵⁵, R⁵⁶, R⁵⁷, and/or up to three radicals R⁵³,

R⁵¹ at each occurrence is independently selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, phenyl and C₁-C₄-alkylen-phenyl, where the phenyl ring may be substituted by up to two radicals R⁵³,

R⁵² at each occurrence is independently selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, E and C₁-C₄-alkylen-E,

R⁵³ at each occurrence is independently selected from the group consisting of hydrogen chlorine, bromine, iodine, fluorine, CN, CF₃, OCF₃, NO₂, OH, O-C₁-C₄-alkyl, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, NH₂, NH(C₁-C₄-alkyl) and N(C₁-C₄-alkyl)₂,

R⁵⁴ at each occurrence is independently selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, phenyl and C₁-C₄-alkylen-phenyl, where the phenyl ring may be substituted by up to two radicals R⁵⁹,

R⁵⁵ at each occurrence is independently selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, phenyl, C₁-C₄-alkylen-phenyl, where the ring may be substituted by up to two radicals R⁶⁰, and OH, O-C₁-C₄-alkyl, O-phenyl, O-C₁-C₄-alkylen-phenyl, NH₂, NH(C₁-C₄-alkyl) and N(C₁-C₄-alkyl)₂,

R⁵⁶ is a group Q¹-Q²-Q³, where

Q¹ is selected from the group consisting of a bond, C₁-C₄-alkylen, C₂-C₄-alkenylen, C₂-C₄-alkynylen, C₁-C₄-alkylen-N(C₁-C₄-alkyl), N(C₁-C₄-alkyl), C₁-C₄-alkylen-NH, NH, N(C₁-C₄-alkyl)-

C_1 - C_4 -alkylen, NH - C_1 - C_4 -alkylen, O , C_1 - C_4 -alkylen- O , O - C_1 - C_4 -alkylen, CO - NH , CO - $N(C_1$ - C_4 -alkyl), NH - CO , $N(C_1$ - C_4 -alkyl)- CO , CO , SO_2 , SO , S , O , SO_2 - NH , SO_2 - $N(C_1$ - C_4 -alkyl), NH - SO_2 , $N(C_1$ - C_4 -alkyl)- SO_2 , O - CO - NH , O - CO - $N(C_1$ - C_4 -alkyl), NH - CO - O , $N(C_1$ - C_4 -alkyl)- CO - O , $N(C_1$ - C_4 -alkyl)- CO - $N(C_1$ - C_4 -alkyl), NH - CO - $N(C_1$ - C_4 -alkyl), $N(C_1$ - C_4 -alkyl)- CO - NH , and NH - CO - NH ,

Q^2 is selected from the group consisting of C_1 - C_4 -alkylen, C_2 - C_4 -alkenyl, C_2 - C_4 -alkynyl, and a bond,

Q^3 is a hydrogen or an unsaturated, saturated or partially unsaturated mono-, bi- or tricyclic ring having a maximum of 14 carbon atoms and 0 to 5 nitrogen atoms, 0 to 2 oxygen atoms and/or 0 to 2 sulfur atoms, which may comprise up to two oxo groups and may be substituted by the radicals R^{63} , R^{64} and/or R^{65} ,

R^{57} at each occurrence is independently selected from the group consisting of hydrogen, C_1 - C_6 -alkyl, phenyl, C_1 - C_4 -alkylen-phenyl, $COOH$, CO - O - C_1 - C_4 -alkyl, $CONH_2$, CO - NH - C_1 - C_4 -alkyl, CO - $N(C_1$ - C_4 -alkyl)₂, CO - C_1 - C_4 -alkyl, CH_2 - NH_2 , CH_2 - NH - C_1 - C_4 -alkyl and CH_2 - $N(C_1$ - C_4 -alkyl)₂,

R^{58} at each occurrence is independently selected from the group consisting of hydrogen, C_1 - C_6 -alkyl, C_2 - C_6 -alkenyl, C_2 - C_6 -alkynyl, phenyl and C_1 - C_4 -alkylen-phenyl, where the phenyl ring may be substituted by up to two radicals R^{62} ,

R^{59} , R^{60} and R^{62} at each occurrence are selected independently of one another from the group consisting of hydrogen, chlorine, bromine, iodine, fluorine, CN , CF_3 , OCF_3 , NO_2 , OH , O - C_1 - C_4 -alkyl, C_1 - C_6 -alkyl, C_2 - C_6 -alkenyl, C_2 - C_6 -alkynyl, NH_2 , $NH(C_1$ - C_4 -alkyl) and $N(C_1$ - C_4 -alkyl)₂,

R^{63} , R^{64} and R^{65} at each occurrence are selected independently of one another from the group consisting of hydrogen, chlorine, bromine, iodine, fluorine, CN , CF_3 , OCF_3 , NO_2 , OH , O - C_1 - C_4 -alkyl, O -phenyl, O - C_1 - C_4 -alkylen-phenyl, phenyl, C_1 - C_6 -alkyl, C_2 - C_6 -alkenyl, C_2 - C_6 -alkynyl, NH_2 , $NH(C_1$ - C_4 -alkyl) and $N(C_1$ - C_4 -alkyl)₂,

provided that if W is a bond, then X is NR^{54} , NR^{54} - CO or NR^{54} - SO_2 , or if W is a bond, then X and Y are a bond and Z is $NR^{51}R^{52}$, provided that if W is a bond, then X is NR^{54} , NR^{54} - CO or NR^{54} - SO_2 , or if W is a bond, then X and Y are a bond and Z is $NR^{51}R^{52}$ or E , where E is an unsaturated, saturated or partially unsaturated mono-, bi- or tricyclic ring having a maximum of 14 carbon atoms and 1 to 5 nitrogen atoms, and 0 to 2 oxygen atoms and/or 0 to 2 sulfur atoms, which ring may comprise up

to two oxo groups and may be substituted by radicals R⁵⁵, R⁵⁶, R⁵⁷ and/or up to three radicals R⁵³, and which ring is bound via a nitrogen ring atom to the remainder of the molecule,

R⁶ and R⁷ are selected independently of one another from the group consisting of hydrogen, chlorine, bromine, iodine, fluorine, CN, CF₃, OCF₃, NO₂, OH, O-C₁-C₄-alkyl, O-phenyl, O-C₁-C₄-alkylen-phenyl, phenyl, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, NH₂, NH(C₁-C₄-alkyl) and N(C₁-C₄-alkyl)₂,

and their tautomeric forms, enantiomeric and diastereomeric forms, and prodrugs thereof.

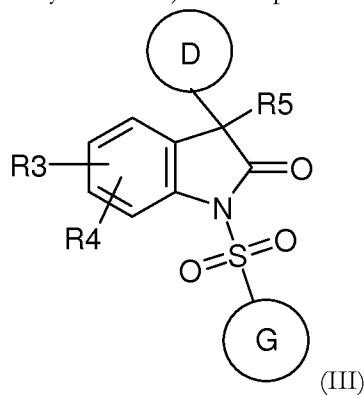
2. (Previously Presented) The compound of claim 1, wherein A is an aromatic heteromonocyclic system comprising 1 or 2 heteroatoms, where one of the 2 heteroatoms is nitrogen.

3. (Previously Presented) The compound of claim 1, wherein A is selected from the group consisting of pyrimidine, pyridine, pyridazine, pyrazine, thiazole, imidazole, thiophene-and furan.

4. (Cancelled).

5. (Cancelled).

6. (Currently Amended) A compound of the formula (III),



in which

D is an aromatic heteromonocyclic ring,

where the heterocycles are 5- or 6-membered rings and comprise up to 4 heteroatoms selected from the group consisting of N, O and S, and up to 2 oxo groups;

and D may be substituted by radicals R²¹, R²² and/or R²³,

G is an aromatic heteromonocyclic, aromatic or partially aromatic heterobicyclic ring,

where the heterocycles are 5- or 6-membered rings and comprise up to 4 heteroatoms selected from the group consisting of N, O and S, and up to 2 oxo groups and

G may be substituted by radicals R⁷¹, R⁷² and/or R⁷³,

R²¹, R²², R²³, R⁷¹, R⁷² and R⁷³ at each occurrence are selected independently of one another from the group consisting of hydrogen, chlorine, bromine, iodine, fluorine, CN, CF₃, OCF₃, NO₂, OH, O-C₁-C₄-alkyl, O-phenyl, O-C₁-C₄-alkylen-phenyl, phenyl, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, NH₂, NH(C₁-C₄-alkyl) and N(C₁-C₄-alkyl)₂, morpholin-4-yl, pyrrolidin-1-yl, piperidin-1-yl, 4-piperazin-1-yl, 4-(C₁-C₄-alkyl)-piperazin-1-yl,

R³ and R⁴ at each occurrence are selected independently of one another from the group consisting of hydrogen, chlorine, bromine, iodine, fluorine, CN, CF₃, OCF₃, NO₂, OH, O-C₁-C₄-alkyl, O-phenyl, O-C₁-C₄-alkylen-phenyl, phenyl, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, NH₂, NH(C₁-C₄-alkyl) and N(C₁-C₄-alkyl)₂, or

R³ and R⁴ are connected to give -CH=CH-CH=CH-, -(CH₂)₄- or -(CH₂)₃-,

R⁵ is a radical (W)-(X)-(Y)-Z, where

W is selected from the group consisting of NR⁵⁴, NR⁵⁴-(C₁-C₄-alkylen) and a bond,

X is selected from the group consisting of CO, CO-O, SO₂, NR⁵⁴, NR⁵⁴-CO, NR⁵⁴-SO₂, CO-NR⁵⁸ and a bond,

Y is C₁-C₆-alkylen, C₂-C₆-alkenyl, C₂-C₆-alkynyl, or a bond,

Z is selected from the group consisting of hydrogen, E, O-R⁵², NR⁵¹R⁵², S-R⁵², where

E is an unsaturated, saturated or partially unsaturated mono-, bi- or tricyclic ring having a maximum of 14 carbon atoms and 0 to 5 nitrogen atoms, 0 to 2 oxygen atoms and/or 0 to 2 sulfur atoms, which may comprise up to two oxo groups, and E may be substituted by radicals R⁵⁵, R⁵⁶, R⁵⁷ and/or up to three radicals R⁵³,

R⁵¹ at each occurrence is independently selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, phenyl and C₁-C₄-alkylen-phenyl, where the phenyl ring may be substituted by up to two radicals R⁵³,

R⁵² at each occurrence is independently selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, E and C₁-C₄-alkylen-E,

R⁵³ at each occurrence is independently selected from the group consisting of hydrogen, chlorine, bromine, iodine, fluorine, CN, CF₃, OCF₃, NO₂, OH, O-C₁-C₄-alkyl, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, NH₂, NH(C₁-C₄-alkyl) and N(C₁-C₄-alkyl)₂,

R⁵⁴ at each occurrence is independently selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, phenyl and C₁-C₄-alkylen-phenyl, where the phenyl ring may be substituted by up to two radicals R⁵⁹,

R⁵⁵ at each occurrence is independently selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, phenyl, C₁-C₄-alkylen-phenyl, where the ring may be substituted by up to two radicals R⁶⁰, and OH, O-C₁-C₄-alkyl, O-phenyl, O-C₁-C₄-alkylen-phenyl, NH₂, NH(C₁-C₄-alkyl) and N(C₁-C₄-alkyl)₂,

R⁵⁶ is a group Q¹-Q²-Q³, where

Q¹ is selected from the group consisting of a bond, C₁-C₄-alkylen, C₂-C₄-alkenylen, C₂-C₄-alkynylen, C₁-C₄-alkylen-N(C₁-C₄-alkyl), N(C₁-C₄-alkyl), C₁-C₄-alkylen-NH, NH, N(C₁-C₄-alkyl)-C₁-C₄-alkylen, NH-C₁-C₄-alkylen, O, C₁-C₄-alkylen-O, O-C₁-C₄-alkylen, CO-NH, CO-N(C₁-C₄-alkyl), NH-CO, N(C₁-C₄-alkyl)-CO, CO, SO₂, SO, S, O, SO₂-NH, SO₂-N(C₁-C₄-alkyl), NH-SO₂, N(C₁-C₄-alkyl)-SO₂, O-CO-NH, O-CO-N(C₁-C₄-alkyl), NH-CO-O, N(C₁-C₄-alkyl)-CO-O, N(C₁-C₄-alkyl)-CO-N(C₁-C₄-alkyl), NH-CO-N(C₁-C₄-alkyl), N(C₁-C₄-alkyl)-CO-NH, and NH-CO-NH,

Q² is selected from the group consisting of C₁-C₄-alkylen, C₂-C₄-alkenylen, C₂-C₄-alkynylen, and a bond,

Q³ is a hydrogen or an unsaturated, saturated or partially unsaturated mono-, bi- or tricyclic ring having a maximum of 14 carbon atoms and 0 to 5 nitrogen atoms, 0 to 2 oxygen atoms and/or 0 to 2 sulfur atoms, which may comprise up to two oxo groups and may be substituted by the radicals R⁶³, R⁶⁴ and/or R⁶⁵,

R⁵⁷ at each occurrence is independently selected from the group consisting of hydrogen, C₁-C₆-alkyl, phenyl, C₁-C₄-alkylen-phenyl, COOH, CO-O-C₁-C₄-alkyl, CONH₂, CO-NH-C₁-C₄-alkyl, CO-N(C₁-C₄-alkyl)₂, CO-C₁-C₄-alkyl, CH₂-NH₂, CH₂-NH-C₁-C₄-alkyl and CH₂-

N(C₁-C₄-alkyl)₂,

R⁵⁸ at each occurrence is independently selected from the group consisting of hydrogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, phenyl and C₁-C₄-alkylen-phenyl, where the phenyl ring may be substituted by up to two radicals R⁶²,

R⁵⁹, R⁶⁰ and R⁶² at each occurrence are selected independently of one another from the group consisting of hydrogen, chlorine, bromine, iodine, fluorine, CN, CF₃, OCF₃, NO₂, OH, O-C₁-C₄-alkyl, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, NH₂, NH(C₁-C₄-alkyl) and N(C₁-C₄-alkyl)₂,

R⁶³, R⁶⁴ and R⁶⁵ at each occurrence are selected independently of one another from the group consisting of hydrogen, chlorine, bromine, iodine, fluorine, CN, CF₃, OCF₃, NO₂, OH, O-C₁-C₄-alkyl, O-phenyl, O-C₁-C₄-alkylen-phenyl, phenyl, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, NH₂, NH(C₁-C₄-alkyl) and N(C₁-C₄-alkyl)₂,

~~provided that if W is a bond, then X is NR⁵⁴, NR⁵⁴-CO or NR⁵⁴-SO₂, or if W is a bond, then X and Y are a bond and Z is NR⁵¹R⁵², provided that if W is a bond, then X is NR⁵⁴, NR⁵⁴-CO or NR⁵⁴-SO₂, or if W is a bond, then X and Y are a bond and Z is NR⁵¹R⁵² or E, where E is an unsaturated, saturated or partially unsaturated mono-, bi- or tricyclic ring having a maximum of 14 carbon atoms and 1 to 5 nitrogen atoms, and 0 to 2 oxygen atoms and/or 0 to 2 sulfur atoms, which ring may comprise up to two oxo groups and may be substituted by radicals R⁵⁵, R⁵⁶, R⁵⁷ and/or up to three radicals R⁵³, and which ring is bound via a nitrogen ring atom to the remainder of the molecule,~~

and their tautomeric forms, enantiomeric and diastereomeric forms, and prodrugs thereof.

7. (Previously Presented) The compound of claim 6, wherein D is an aromatic heteromonocyclic system comprising 1 or 2 heteroatoms, where one of the 2 heteroatoms is nitrogen.

8. (Previously Presented) The compound of claim 6, wherein D is selected from the group consisting of pyrimidine, pyridine, pyridazine, pyrazine, thiazole, imidazole, thiophene and furan.

9. (Previously Presented) The compound of claim 6 wherein G is selected from the group consisting of thiophene, furan, pyrrole, pyrazole, isoxazole, pyridine, pyrimidine, quinoline, isoquinoline, tetrahydroisoquinoline, benzothiophene, benzofuran, indole, imidazole, thiazole, imidazothiazole, benzooxazine and quinoxaline.

10. (Previously Presented) A pharmaceutical composition comprising a compound as claimed in claim 1 and a pharmaceutically acceptable carrier.

11. (Cancelled)
12. (Cancelled)
13. (Cancelled)
14. (Cancelled)
15. (Cancelled)
16. (Cancelled)
17. (Cancelled)
18. (Previously Presented) A pharmaceutical composition comprising a compound as claimed in claim 6 and a pharmaceutically acceptable carrier.
- 19.-31 (Cancelled).